

## **ABSTRACT OF THE DISCLOSURE**

A method for assigning orthogonal codes used for a first system and a second system in a CDMA system including channels of the first system for spreading a pilot signal, a sync signal, a paging signal and a traffic signal with a first set of orthogonal codes corresponding to orthogonal code numbers in different rows from a set of orthogonal codes arranged in a matrix of  $m$  rows and  $m$  columns, and channels of the second system for spreading a second set of orthogonal codes corresponding to orthogonal code numbers different from said orthogonal code numbers for the first set of orthogonal codes. The orthogonal codes for the second system are transmitted at a data rate higher than a data rate of the first system. The method comprises the steps of: assigning orthogonal codes corresponding to the orthogonal code numbers of the orthogonal code set associated with at least one of  $2n$  rows to the channels of the first system, wherein a set of the orthogonal codes are arranged in a matrix of subsets of orthogonal codes and inversed orthogonal codes, each subset including  $2n$  rows and  $2n$  columns; and assigning orthogonal codes corresponding to the orthogonal code numbers of the orthogonal code set associated with at least one of the remaining rows to the second system.